(v) Short-circuit protection to be provided at outby end of portable trailing cable.

[33 FR 4660, Mar. 19, 1968, as amended at 57 FR 61223, Dec. 23, 1992]

§18.95 Approval of machines constructed of components approved, accepted or certified under Bureau of Mines Schedule 2D, 2E, 2F, or 2G.

Machines for which field approval is sought which are constructed entirely from properly identified components that have been investigated and accepted or certified for applications on approved machines under the Bureau of Mines Schedule 2D, 2E, 2F, or 2G, shall be approved following a determination by the electrical representative that the construction of the entire machine is permissible and conforms to the data submitted in accordance with §18.94.

§18.96 Preparation of machines for inspection; requirements.

(a) Upon receipt of written notice from the Health and Safety District Manager of the time and place at which a field approval investigation will be conducted with respect to any machine, the applicant will prepare the machine for inspection in the following manner:

(1) The machine shall be in fresh air out by the last open crosscut and free from obstructions, or, if the machine is located on the surface, moved to a clear area;

(2) All enclosure covers shall be removed;

(3) The flanges and interior of each enclosure, including the cover, shall be cleaned thoroughly;

(4) All hoses, cables, cord, and conveyor belts shall be wiped clean to expose surface markings;

(5) All electrical components shall be cleaned to reveal all stampings, identification plates, certification numbers, or explosion test markings.

§18.97 Inspection of machines; minimum requirements.

(a) Except as provided in §18.95, all machines approved under the provisions of this subpart E shall, where practicable, meet the minimum design and performance requirements set forth in subpart B of this part 18 and, where necessary, the requirements of §18.98.

(b) The inspection of each machine shall be conducted by an electrical representative and such inspection shall include:

(1) Examination of all electrical components for materials, workmanship, design, and construction;

(2) Examination of all components of the machine which have been approved or certified under Bureau of Mines Schedule 2D, 2E, 2F, or 2G to determine whether such components have been maintained in permissible conditions;

(3) Comparison of the location of components on the machine with the drawings or photographs submitted to determine that each of them is properly located, identified and marked;

(4) Pressure testing of explosion-proof compartments, when necessary, shall be conducted in accordance with §18.98; and:

(i) Where the results of pressure testing are acceptable, the applicant shall be advised;

(ii) Where the explosion-proof enclosure is found unacceptable, the applicant shall be so informed;

(iii) If the performance of the explosion-proof enclosure is questionable, the qualified electrical representative may, at the request of the applicant, conduct a further detailed examination of the enclosure after disassembly and record his additional findings on MSHA Form No. 6–1481 under Results of Field Inspections.

[33 FR 4660, Mar. 19, 1968, as amended at 42 FR 8373, Feb. 10, 1977]

§18.98 Enclosures, joints, and fastenings; pressure testing.

(a) Cast or welded enclosures shall be designed to withstand a minimum internal pressure of 150 pounds per square inch (gage). Castings shall be free from blowholes.

(b) Pneumatic field testing of explosion-proof enclosures shall be conducted by determining:

(1) Leak performance with a peak dynamic or static pressure of 150 pounds per square inch (gage); or

(2) A pressure rise and rate of decay consistent with unyielding components during a pressure-time history as derived from a series of oscillograms.